Introducing Cloud Computing to Make Cities Smarter

Dr. Julia Glidden
21c Consultancy

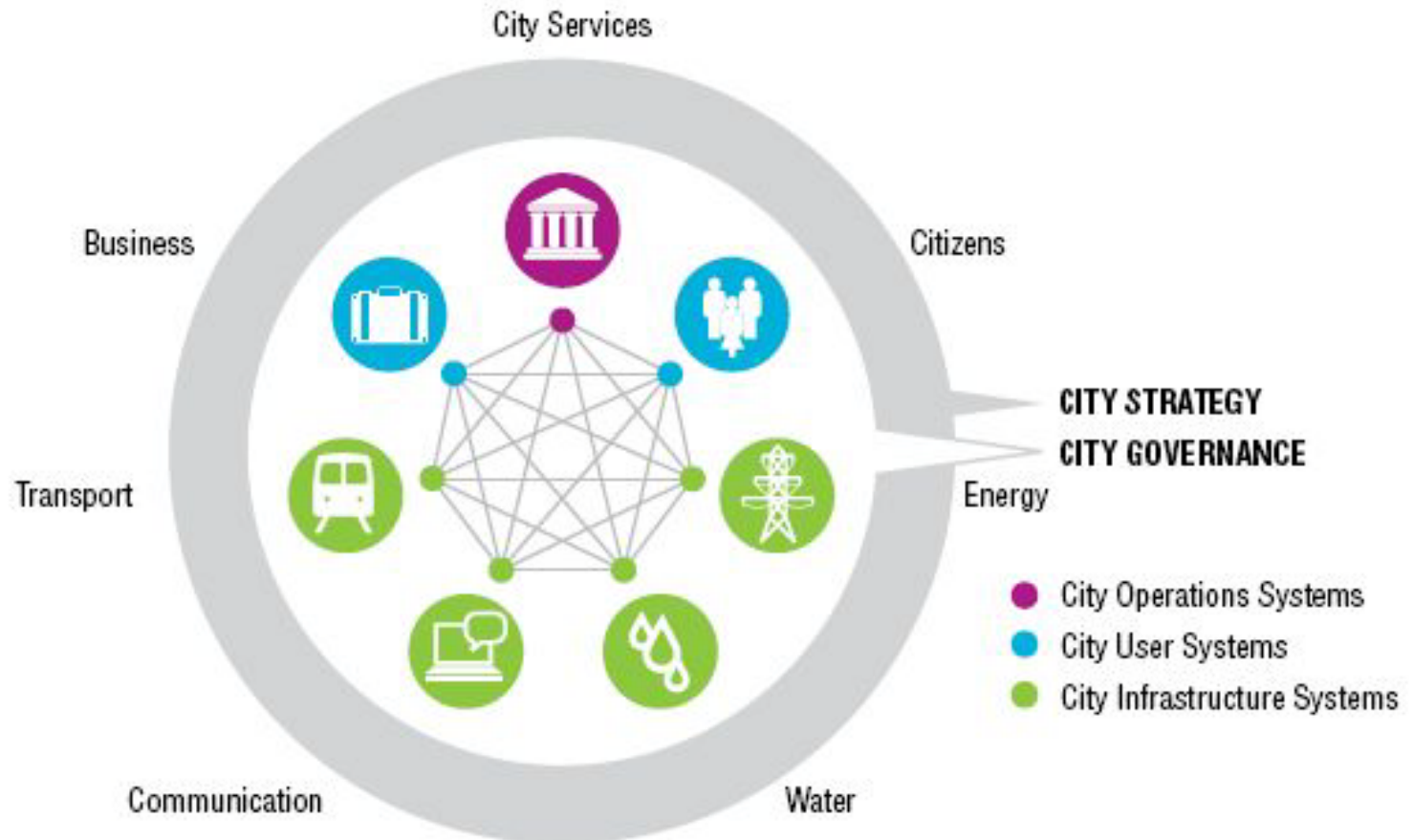**Bahrain International eGovernment Forum 2011**

Introducing the EPIC Challenge....

Introducing EPIC….

- **EPIC:** The European Platform for Intelligent Cities

- Funded by the European Commission

- **Pioneer project** in the new 'Smart Cities' and 'Living Labs' initiatives

EPIC
EU Platform
for Intelligent Cities

What is a Smart City?

City Services

Business

Citizens

Transport

CITY STRATEGY
CITY GOVERNANCE

Energy

Communication

Water

City Operations Systems
City User Systems
City Infrastructure Systems

EPIC
EU Platform
for Intelligent Cities

'What are Living Labs?'

The Current Challenge.....

- Since 1995, the European Commission has funded a number of initiatives to improve government services

- Yet technical and procedural limitations have prevented European cities from harnessing the full power of Living Labs and truly working Smarter

EPIC
EU Platform
for Intelligent Cities

The EPIC Answer…..

EPIC
EU Platform
for Intelligent Cities

EPIC Opportunities…..

EPIC combines unparalleled expertise:

- **Strong industrial players:**   IBM and Deloitte
- **Living Labs networks:**   ENoLL
- **Living Labs:**   IBBT Brussels, Issy Media, Manchester
- **Technology researchers:**   Fraunhofer Institute, IBM cloud core enterprise services and the National Technical University of Athens
- **IOT specialists:**   BCU (Birmingham City University)
- **SMEs:**   ATC, Navidis, IS-practice and 21c

E P IC
EU Platform
for Intelligent Cities

The EPIC Solution….

- **Use the IBM Cloud as the basis for a European-based web-service delivery platform**
  - ➢ Focus on key building blocks i.e. authentication, security
  - ➢ Identify standards and protocols for new technologies i.e. IoT, Mobile, 3D

- **Pilot 'Smart City' use of the platform across Europe**
  - ➢ Involve Living Lab pilot sites to provide user driven open innovation and test the EPIC platform

- **Develop a Roadmap for pan-European implementation**
  - ➢ Include practical focus on working business models, including PPP
  - ➢ Identify standards for user-driven open innovation

EPIC
EU Platform
for Intelligent Cities

'Smart' EPIC Services...

Relocation Service

'Smart' EPIC Services...

Urban Planning Service

'Smart' EPIC Services...

Smart Environment Service

EPIC Outcomes

Outcome 1: Infrastructure

- A tested prototype for a pan-European web service delivery platform and IoT extensions

Outcome 2: Strategy

- A deployment Roadmap that shows, among other things, how a 'Smart' City can transition eGovernment and other services to web-based services and Cloud Computing

E P I C
EU Platform
for Intelligent Cities

EPIC: A Global Platform for 'Smarter Cities?'